



Jon S. Corzine  
Governor

State of New Jersey  
Department of Environmental Protection  
Site Remediation and Waste Management Program  
Division of Remediation Management and Response  
Bureau of Case Management  
P.O. Box 028  
Trenton, NJ 08625

Lisa P. Jackson  
Commissioner

## FAX COVER SHEET

To: Jim Haklar  
Company: USEPA Region II, TSCA  
Fax: 732-321-6788  
Phone: 732-906-6817

From: Lynn E. Vogel (NJDEP-BCM)  
Pages: 6 (including cover page)  
Date: May 9, 2006  
Re: Hatco Correspondence

☐ Urgent    ☒ For Review    ☐ Please Comment    ☐ Please Reply    ☐ Please Recycle

Jim,

As requested here is the NJDEP January 25, 2006 Comment Letter for Consolidated Remedial Action Workplan dated August 2005.

When I find an extra copy of Weston Response to Comment Letter dated March 22, 2006 I will forward it along.

As requested,  
NJDEP Technical Coordinator - Jim Kealy 973-338-4404 (home) - jim.kealy@dep.state.nj.us  
(I tend to email Jim first to confirm where he is before I call since he also works out of the NJDEP Cedar Knolls office. He has a long history with the site and can discuss PCBs at length).

If you have any questions please call me at 609-984-5311. My fax number is 609-633-1439.  
My email address is [lynn.vogel@dep.state.nj.us](mailto:lynn.vogel@dep.state.nj.us).

Thank you,

Lynn E. Vogel

681410





## State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
Site Remediation and Waste Management Program  
Bureau of Case Management  
PO Box 028  
Trenton, New Jersey 08625

JON S. CORZINE  
Governor

LISA P. JACKSON  
Acting Commissioner

Daniel Kopcow, P.E.  
Weston Solutions, Inc.  
205 Campus Drive  
Edison, New Jersey 08837

January 25, 2006

Dear Mr. Kopcow:

Re: Consolidated Remedial Action Workplan (dated August 2005)  
Fords, Middlesex County, New Jersey

The New Jersey Department of Environmental Protection (NJDEP) has received the Hatco Site Consolidated Remedial Action Workplan (RAWP) dated August 2005 as prepared by Weston Solutions (Weston). This consolidated RAWP is based on the Draft RAWP (March 2001) prepared by URS Corporation, the Addendum to the Draft RAWP (March 2002) prepared by the Remedium Group, and the Second Addendum Letter to the Draft RAWP (November 2004) prepared by Weston. NJDEP correspondence dated February 17, 2005 indicated that the November 2004 document was provisionally acceptable provided several issues were addressed within a comprehensive RAWP. However, it has come to our attention that several issues in previous iterations of the RAWP has still not been adequately addressed and are referenced below.

### Background

The Hatco (Site) is an active chemical production facility located in Woodbridge Township, Middlesex County in the town of Fords. The Site occupies an 80-acre parcel that is bounded by several roadways as well as residential and commercial and industrial properties. From 1959 to 1978, W.R. Grace operated an organic chemical manufacturing facility at the Site. W.R. Grace manufactured phthalic anhydride, plasticizers, benzyl chloride, sebacic acid, capryl alcohol and synthetic lubricants. In the 1960's manufacturing operations also including heat transfer fluids containing PCBs. In 1978, Hatco Corporation purchased the facility; and still owns and operates the facility today. Until recently, all remedial activities at the Site were conducted by the Hatco Corporation and W.R. Grace. In June 2005, Weston Solutions entered into an Administrative Consent Order (ACO) with the NJDEP whereby Weston is now responsible for the remediation of contamination at the Site that has occurred prior to November 4, 2002.

Documents submitted by Weston in 2004 modified the original request for on-site risk-based disposal of PCB contaminated materials by Hatco and W.R. Grace. Documents submitted previously to NJDEP and USEPA included the Draft Remedial Action Work Plan and a Site Specific Human Health Risk Assessment in accordance with the requirements of the "USEPA PCB Mega Rule", 40 CFR 761.61. Weston proposed and as of March 2005 has received approval from the USEPA, pursuant to Toxic Substances Control Act (TSCA) regulations, for on-site capping of PCB-contaminated materials up to 500 mg/kg.

Page 2 of 5

January 25, 2006

NJDEP RAWP Comments

### General Comments

1. The USEPA Mega Rule states that Bulk PCB remediation wastes may remain at a cleanup site, *in low occupancy areas*, at concentrations greater than 25 ppm and less than 100 ppm, if the site is covered with a cap meeting the requirements of paragraphs (a)(7) and (a)(8) of 40 CFR 761.61. Weston must determine whether or not the contaminated areas which are proposed to be capped in this operational facility would meet the regulatory definition of a *low occupancy area*.
2. Based on a review of the site files, it is not clear if the ecological issues on and off-site have been fully addressed. Capping of offsite soils to meet the Remedial Action Objectives (RAO) of 2 mg/kg is based on the human-health Non-Residential Direct Contact Soil Cleanup Criteria (NRDCSCC) and would not necessarily be protective of wetlands or soils where ecological screening criteria or ecorisk-based remedial goals applies. Weston must ensure protectiveness of ecological receptors in wetlands and soils outside of the remedial footprint.

### Specific Comments

1. **Section 3.2.3 Groundwater, Page 3-5:** The text states "based on the results of the Phase III RI sampling, the following analytes were identified as potentially Site-related constituents of concern in groundwater..." As noted in the New Jersey Register dated November 7, 2005, Groundwater Quality Standards (GWQS) have changed for several contaminants including two site related constituents of concern: bis-(2-ethylhexyl) phthalate (BEHP) and arsenic. Weston should revise relevant text and tables to reflect the recent changes to the GWQS. In addition, Weston should reevaluate the historical groundwater analytical data to determine if said changes in the GWQS identify any other potential site-related constituents of concern.
2. **Section 3.3 Receptor Evaluation, Page 3-12:** The text states "...the baseline Ecological Evaluation (BEE) is provided in Appendix H." However, Appendix H is missing from the RAWP, and it is unclear if a final BEE was ever submitted for NJDEP approval. Weston must submit the approved final BEE as indicated in Appendix H of this RAWP. In addition, it is unclear whether BEE comments provided by NJDEP on the March 21, 2001 were adequately addressed. The BEE comments expressed concern that conservative exposure assumptions were not used for food chain modeling, which is standard for screening-level BEEs (e.g., maximum instead of mean media concentrations; mink as the most sensitive receptor for PCBs) as less conservative values may be appropriate for a full ecological risk assessment, where site-specific tissue data would be available.  
  
In addition, Weston should more clearly describe how the 1 mg/kg sediment RAO was developed and how protectiveness to aquatic and piscivorous wildlife receptors will be ensured.
3. **Section 4.2.3 Off-site Soils, Page 4-5:** The text states "Remediation requirements and RAOs for off-site soil are consistent with on-site soil (Section 4.2.1)." Weston is proposing to use 2 mg/kg as the action level for remediation of off-site soils, and 1 mg/kg for sediments pending negotiations with neighboring property owners regarding deed restrictions. The proposed 2 mg/kg for off-site soils is acceptable to NJDEP as long as the neighboring property owners agree to the deed restrictions. If neighboring property owners do not agree to the deed restrictions then the NJDEP Residential Direct Contact Soil Cleanup Criteria (RDCSCC) of 0.49 mg/kg (for PCBs) must be used as cleanup criteria for off-site soils.

Page 3 of 5

January 25, 2006

NJDEP RAWP Comments

**4. Section 4.2.4 Stream Sediment, Page 4-5:** The RAWP should be amended to more clearly describe how the 1 mg/kg sediment RAO was developed and how protectiveness to aquatic and piscivorous wildlife receptors will be ensured.

**5. Section 4.3.5 Stream Sediment, Page 4-16:** The RAWP should be amended to more clearly describe how the 1 mg/kg sediment RAO was developed and how protectiveness to aquatic and piscivorous wildlife receptors will be ensured.

The text states "...concentrations of PCBs above the action level of 1 mg/kg were detected in the Crows Mill Creek stream sediment." NJDEP requires additional soil/sediment sampling to be implemented during the design phase to better define the extent of the remediation area. Pre-remediation sampling is needed to confirm that the extent of contamination in environmentally sensitive areas has been fully delineated. Post-remediation sampling is required to document the effectiveness of the remediation. Specifically, pre-remediation sampling is required in the "Channel C" area and the pond to which it drains to ensure PCBs have not historically migrated to these areas during flood events. Weston may address these additional sampling requirements in the Pre-Design Investigation as noted in **Section 8.0 Implementation Schedule**.

**6. Section 4.4.1 On-site Cap, Page 4-24, Paragraph 1:** The text states "In areas where PCB contamination exists above 500 ppm, soils will be excavated for off-site disposal." NJDEP requires additional soil/sediment sampling to be implemented during the remedial design phase to better define the extent of the remediation area in and around remediation areas. Post remediation sampling is required to document the effectiveness of the remediation. Since much of the high levels of PCBs are related to LNAPL, it is expected that remediation of contaminated soil below the water table will need to occur. Weston may address these additional sampling requirements in the Pre-Design Investigation as noted in **Section 8.0 Implementation Schedule**.

**7. Section 4.4.1 On-site Soil Cap, Page 4-25:** A geotextile liner or other means of demarcation is required to delineate the top of the contaminated soil prior to placement of the soil cap. This is necessary to differentiate the top of the contaminated soil in the event that the cap is later disturbed. Weston may address this in the Design phase as noted in **Section 8.0 Implementation Schedule**.

**8. Section 4.4.2 Off-site Soil Cap, Page 4-26:** See comments concerning **Section 4.4.1 On-Site Soil Cap**.

**9. Section 4.4.3.1 Stream Sediment, North of Industrial Avenue (Channels A and B), Page 4-27:** The text states "...Channels A and B will be covered in place during installation of the soil cap, and that a new clean drainage channel will be established...". However, Figure 4-2 indicates that portions of Channel B are not within the remediation area. Weston must clarify if all or parts of Channels A and B will be covered by the proposed remediation. If a larger section of Channel B is to be included under the cap, then **Figure 4-2** should be revised accordingly.

As stated above, NJDEP requires additional soil/sediment sampling to be implemented during the design phase to better define the extent of the remediation area. Pre-remediation sampling is required to confirm that the extent of contamination in environmentally sensitive areas has been fully delineated. Post remediation sampling is required to document the effectiveness of the

Page 4 of 5

January 25, 2006

NJDEP RAWP Comments

remediation. Weston may address these additional sampling requirements in the Pre-Design Investigation as noted in **Section 8.0 Implementation Schedule**.

**10. Section 4.4.3.2 Stream Sediment, South of Industrial Avenue (Channel D), Page 4-27:** As discussed at NJDEP November 16, 2005 site visit, additional sediment sampling was conducted in a Crows Mill Creek unnamed ditch by Sovereign Consulting for the former Nuodex Corporation Facility (El Paso Corporation, EPC). A Sovereign Consulting report dated May 4, 2005 stated that "PCBs and BEHP contaminated sediments are being transported into the wetlands area into which Crows Mill Creek drains (an area that is outside of Hatco's proposed remediation area)." The analytical data indicates concentrations of PCBs in off-site sediments up to 14 mg/kg. A Weston representative reported that the Sovereign Consulting sediment sample locations were actually collected in Channel D and were reportedly misrepresented on the figures provided by Sovereign Consulting. Weston must provide additional clarification and discussion of these sediment sample locations and associated analytical data collected in the Crows Mill Creek.

As stated above, NJDEP requires additional soil/sediment sampling to be implemented during the remedial design phase to better define the extent of the remediation area. Pre-remediation sampling is required in the stream and wetlands adjacent to and further downgradient of Channel D (south of Industrial Ave.) to ensure PCBs have not historically migrated to these areas during flood events. Post remediation sampling is required to document the effectiveness of the remediation. Weston may address these additional sampling requirements in the Pre-Design Investigation as noted in **Section 8.0 Implementation Schedule**.

**11. Section 4.4.3.2 Stream Sediment, South of Industrial Avenue (Channel D), Page 4-28, Bullet 6:** The text states "Replacing removed material with gravel." The gravel and stone fill proposed for stream restoration may not meet regulatory requirements pursuant to *Freshwater Wetlands Protection Act Rules (N.J.A.C. 7:7A)*. A more natural type of stream restoration using biologists or other means may be more appropriate.

**12. Section 4.6.1 Cap Maintenance, Page 4-30:** Weston should include periodic monitoring of surface water and sediment in the Channels and wetlands as part of the long term Maintenance and Monitoring of the cap/soil cover on and off-site.

**13. Section 4.6.2 Groundwater Monitoring, Page 4-31:** The text states "A groundwater monitoring program will be initiated after the removal of the LNAPL to the extent practical." Previous iterations of this RAWP adequately address this topic, however, this RAWP revision did not. As noted in Comment 6 of the September 28, 2001 NJDEP letter concerning the March 2001 Draft RAWP, "The RAWP states that a groundwater remedy will be proposed once LNAPL has been removed. Please note that the Department considers LNAPL recovery a groundwater remedy. Therefore, regardless of which LNAPL recovery method the Parties choose for the site, the LNAPL recovery program shall include semi-annual groundwater sampling, groundwater elevation measurements, and product level measurements. The groundwater remedy shall also include a Classification Exception Area and Well Restriction Area. The Parties shall submit annually, the results of the semi-annual groundwater sampling, groundwater elevation measurements and product level measurements. These results shall be included in a progress report that shall include data tables, maps showing the water quality data, contoured groundwater elevation data, and free product thickness. These requirements shall be included in the revised RAWP." The Remedium Group March 2002

Page 5 of 5

January 25, 2006

NJDEP RAWP Comments

Response to NJDEP Comments, Addendum to the Draft RAWP stated "The Parties agree to submit in the revised RAWP a LNAPL recovery groundwater monitoring program which meets the requirements as noted in the above comment..." As part of the LNAPL recovery remedy, Weston must conduct a semi-annual groundwater monitoring program pursuant to *Technical Requirements for Site Remediation, Subchapter 6 (N.J.A.C. 7:26E Subchapter 6)*. The RAWP must be revised to include the details of the semi-annual groundwater monitoring program including sampling network, analytical parameters sampled and analytical methods used and progress report submittals.

**14. Table 3-1 Summary of Soil Criteria Exceedances:** Table 3-1 is unreadable in its present format. The third footnote indicates that the "Compounds/percentages highlighted in blue...exceed one or more criteria." The copy provided to NJDEP is not in color and therefore it is too dark to read the underlying information. Weston must resubmit a readable Table 3-1.

**15. Table 4-1 Summary of Detected Organic Compounds and Physical Properties of LNAPL Samples:** Table 4-1 is unreadable in its present format. The copy provided to NJDEP is not in color and therefore it is too dark to read the underlying information in the second row. Weston must resubmit a readable Table 4-1.

**16. Figure 4-2 Proposed Extent of Engineering Control and Soil/Sediment Excavation Areas:** Weston must revise Figure 4-2 to include identifiers for Channels A, B, C and D. As this map is the Proposed Extent, the Figure 4-2 should be enlarged to include Channel D sampling locations and proposed remedial activities. For additional revisions see comments concerning **Section 4.4.3.1 Stream Sediment, North of Industrial Avenue (Channels A and B)**, above.

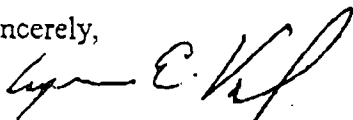
**17. Figure 4-15 Cap Cross-Sections:** For revisions to Figure 4-15, see comment concerning **Section 4.4.1 On-Site Soil Cap and Section 4.4.2 Off-site Soil Cap**.


**18. Appendix G Human Health Receptor Evaluation:** An additional RAO should be included in the RAWP. Weston should prevent and control the transport of potentially contaminated soil and sediments from the Site (including the muck disposal area, upstream Channels A and B and adjacent wetlands) into downstream areas such as Channel D, Crows Mill Creek and any wetlands or other ecological receptors.

Weston shall submit an addendum to the Consolidated RAWP within thirty (30) days of receipt of this letter addressing the above concerns and including a revised schedule.

Please contact me at 609-984-5311 or via email at [lynn.vogel@dep.state.nj.us](mailto:lynn.vogel@dep.state.nj.us) if you have any questions.

Sincerely,



  
Bureau of Case Management

Cc: Jim Kealy, NJDEP, BEERA  
Anne Pavelka, NJDEP, BGWPA